

Claims

1. An affinity-chromatography assay system comprising with an immobilised
5 component containing a bio-reagent and a flowable component containing a
complimentary bio-reagent characterised in that the immobilised component is
supported on a dip strip or planar surface and the flowable component is adapted to
flow down the dip strip of high density.
- 10 2. An affinity-chromatography assay system according to claim 1 characterised
in that the flowable component is of a higher density than the bulk solution.
3. An affinity-chromatography assay system according to claim 1 characterised
in that immunoreagent is an antigen or antibody.
- 15 4. An affinity-chromatography assay system according to claim 1 characterised
in that the flowable component is retained in a discrete volume.
5. An affinity-chromatography assay system according to claim 1 characterised
20 in that the constituents of the flowable phase include a bio-polymer, a detergent and a
buffer of optimal pH
6. An affinity-chromatography assay system according to claim 1 characterised
in that the immobilised component possesses properties that result in attraction of the
25 flowable component.
7. An affinity-chromatography assay system according to claim 6 characterised
in that the attraction of the flowable component is achieved by a membrane.
- 30 8. An affinity-chromatography assay system according to claim 7 characterised
in that the membrane is both hydrophobic and wettable.

9. An affinity-chromatography assay system according to claim 3 characterised in that the assay is either a competitive or non-competitive immunoassay using appropriate combinations of labelled antigen or labelled antibody with their complementary unlabelled counterparts.
- 5 10. An affinity-chromatography assay system according to claim 9 characterised in that the label is a fluorescent or coloured label.
11. A method of conducting an affinity-chromatography assay which comprises
10 the use of an assay system according to claim 1.
12. A method according to claim 11 characterised in that the dipstrip that is stood substantially upright in a buffer solution.
- 15 13. A method according to claim 11 characterised in that the flowable component is dispensed adjacent the upper or lower part of the dipstrip.
14. A method according to claim 11 characterised in that the method comprises the separation of analyte mixtures.
- 20 15. A method according to claim 11 characterised in that the components have different binding affinities for the surface.
16. A method according to claim 11 characterised in that the method comprises a
25 single step assay.
17. A method according to claim 11 characterised in that the method comprises the separation of biological polymers.
- 30 18. A method according to claim 17 characterised in that the biological polymers are selected from proteins and DNA/RNA.

19. An affinity-chromatography assay system or a method substantially as described with reference to the accompanying examples.

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